CLAIMS

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is as follows:

1. A computer implemented system analysis and design method for use in a complex business environment characterized by a set of tightly linked business processes comprising the steps of:

capturing in a framework a world view of a business decision and/or a business application software system, wherein a world view is defined by business objectives, constraints, assumptions, data, and underlying model used in business decision and/or the application software system; and

using the framework to specify and document each business decision and/or business application software system in the complex environment.

2. The computer implemented system analysis and design method recited in claim 1, wherein a BDML (Business Decision Markup Language) is used to implement the framework for specifying the world view of a business decision and/or a business application software system.

3. The computer implemented system analysis and design method recited in claim 2, wherein the BDML is used for the creation and maintenance of a knowledge base of business decisions and processes within an organization.

4. The computer implemented system analysis and design method recited in claim 2, wherein the BDML is used for the publication of the functional specification of a business application software system, the world view of a technical research paper in the area of business decisions and its findings.

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1 5. The computer implemented system analysis and design method recited in
2 claim 2, wherein the BDML is machine-readable by a BDML processor as
3 well as readable by human users so that it can be used for systematic
4 documentation of business objectives, constraints, assumptions, data, and
5 underlying model in business processes and/or application software systems.

1 6. The computer implemented system analysis and design method recited in
2 claim 2, wherein the BDML supports XML (eXtensible Markup Language)
3 based standards for business to business exchanges.

1 7. A BDML (Business Decision Markup Language) processor comprising:
2 a syntax processor that checks the syntax correctness and syntax
3 consistency within an individual and between different documents written in
4 BDML;
5 a logic processor that checks logical consistency between different
6 documents written in BDML, in terms of the business objectives, constraints,
7 assumptions, data, and underlying model among the different documents; and
8 a knowledge-based processor including a knowledge base of business
9 decisions, common choices for their decision support models and
10 commercially available decision support systems, the knowledge-based
11 processor providing suggestions for a set of BDML documents to improve
12 consistency using the knowledge base.